Ethnic Speech and Ethnic Action as Ethnic Behavior I:

Construction of the Brunel Ethnic Behavior Inventory (BEBI)

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Abstract

In this article we report the construction of a new survey – specifically, the Brunel Ethnic Behavior Inventory (BEBI) – designed to measure ethnic speech and ethnic action as separate, yet related, aspects of individuals' ethnic behavior. Using Tajfel's (1981; Tajfel & Turner, 1986) social identity theory as our conceptual frame of reference, we sought an answer to the research question of how many factors actually are measured by the BEBI; and we tested the hypothesis that a two-factor model (i.e., ethnic speech and ethnic action as two correlated factors) would provide significantly better goodness-of-fit to the correlational data than would a one-factor model (i.e., ethnic behavior as one undifferentiated factor). Across one pilot sample (n = 101) and two main samples (n = 120 for Sample 1, n = 148 for Sample 2), we found that, not only did the BEBI measure two factors at most (i.e., ethnic speech and ethnic action); but consistent with our hypothesis, the two-factor model yielded better goodness-of-fit than did the one-factor model. Implications for the conceptualization and measurement of "ways of ethnicity" (Verkuyten, 2005) are discussed.

KEYWORDS: ethnic identity, ethnic action, ethnic behavior, ethnic speech, exploratory factor analysis, social identity theory.

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In *The Social Psychology of Ethnic Identity*, Verkuyten (2005, p. 198) contended that four "ways of ethnicity" can be identified among members of ethnic majority and minority groups alike: (1) *"being,"* (2) *"feeling,"* (3) *"knowing,"* and (4) *"doing."* "Being," or "that which you 'are'," refers to the ethnic category labels that individuals apply to themselves (Phinney, 1996). "Feeling," or "that which you 'feel'," refers to individuals' positive versus negative emotions or affect toward the ethnic group(s) to which they belong (see Ong, Fuller-Rowell, & Phinney, 2010). "Knowing," or "that which you 'know'," refers to individuals' positive versus negative thoughts or cognition toward the ethnic group(s) to which they belong (Ong, Fuller-Rowell, & Phinney, 2010). Finally, "doing," or "that which you 'do'," refers to individuals' involvement in social participation and cultural practices regarding their ethnic group (Phinney, 1990).

Among the "ways of ethnicity" that Verkuyten (2005) described, "doing" – which we will denote as *ethnic behavior* throughout the present article – has proven to be especially difficult to measure in a valid manner. In fact, Phinney and Ong (2007) specifically cited problems with the measurement of ethnic behavior in the process of limiting their Multigroup Ethnic Identity Measure-Revised version (MEIM-R) to *exploration* (which they viewed as a cognitive and developmental construct) and *commitment* (which they viewed as an affective construct), not ethnic behavior, as components of ethnic identity. Furthermore, although they did not comment on difficulties in measuring ethnic behavior, Douglass and Umana-Taylor (2015) limited their Ethnic Identity Scale-Brief version (EIS-B) to exploration, commitment (which Douglass and Umana-Taylor renamed as *resolution*), and *affirmation* (which is

explicitly more affective in content than is exploration, and implicitly more affective than is commitment/resolution; see Umana-Taylor, 2011). Thus, like Phinney and Ong, Douglass and Umana-Taylor did not assess ethnic behavior as a component of ethnic identity.

In this article we introduce a new survey of ethnic behavior – namely, the Brunel Ethnic Behavior Inventory (BEBI). Inspired by Verkuyten's (2005) distinction between what people say (which we denote as *ethnic speech*) and what people do (which we denote as *ethnic action*) in the process of communicating their ethnicity, we examine the psychometric properties (especially construct validity; Nunnally & Bernstein, 1994) of the BEBI as a measure of two distinct, yet interrelated, dimensions of ethnic behavior. En route to assessing the psychometric properties of the BEBI, we draw upon Tajfel's (1981; Tajfel & Turner, 1986) social identity theory – which Verkuyten adopted in large part – as we develop a conceptual rationale for the dual constructs of ethnic speech and ethnic action.

Ethnic Behavior as a Special Instance of Social Behavior: A Social Identity Theory Perspective

According to Tajfel's (1981; Tajfel & Turner, 1986) *social identity theory*, individuals' answer to the question "Who am I?" need not be limited to individuals' uniquely constructed self-definitions. Rather, much of the content of individuals' identity may include one or more self-definitions that individuals construct in accordance with implicit or explicit expectations from various societal agents (e.g., family members, religious leaders, government officials; Abrams, 2015). Indeed, from the standpoint of personality development, the emergence of individuals' social identities may be a necessary prerequisite for the emergence of individuals' personal identities (Swann & Bosson, 2010).

In and of itself, social identity theory (Tajfel, 1981; Tajfel & Turner, 1986) does not specify which aspects of social identity are especially likely to contribute to individuals' sense of who they are (Abrams, 2015). Nevertheless, according to Verkuyten (2005), ethnic identity occupies a special place in most individuals' overall identity because of the utility of ethnicity in helping individuals integrate their past, present, and (possible) future self-definitions –whether arising solely from the individual and/or arising from interactions with various societal agents (see Baumeister, 1997) – into a coherent whole. Verkuyten's account concerning the particular importance of ethnic identity is consistent with the assumption (e.g., Snyder & Cantor, 1998) that culture permeates individuals' agendas and outcomes at all levels (i.e., individual, interpersonal, relationship, and group).

Moreover, in and of itself, social identity theory (Tajfel, 1981; Tajfel & Turner, 1986) does not specify which aspects of social behavior are most likely to be related to individuals' identity as a whole (Hogg, 2012). However, Verkuyten (2005) suggested that ethnic behavior is especially prominent among aspects of social behavior because of the particular role that ethnic behavior plays in promoting individuals' ethnic identity development and in promoting the survival of the ethnic groups to which individuals presumably belong. Verkuyten's view regarding the primacy of ethnic behavior is consistent with Fiske, Kitayama, Markus, and Nisbett's (1998) model of psychological process and cultural content (cited by Snyder & Cantor, 1998), which in turn emphasizes that culture and personality possess the potential to shape and reinforce each other.

Ethnic Speech and Ethnic Action as Distinct, yet Related, Aspects of Ethnic Behavior

Like other aspects of social behavior, Tajfel's (1981; Tajfel & Turner, 1986) social identity theory refers to active, constructive forms of ethnic behavior as *voice* or *social action* (Brown, 1986). Although the terms "voice" and "social action" appear to be synonymous at first glance, we believe that the two terms actually denote separable, yet interrelated, dimensions of ethnic behavior. As indicated above, we shall use the term *ethnic speech* when referring to individuals' words that are intended to communicate individuals' ethnicity, and *ethnic action* when referring to individuals' deeds that are intended to communicate individuals' ethnicity, as dual components of ethnic behavior.

According to Milner (1996), ethnic speech and ethnic action represent two side of the same behavioral coin. Nevertheless, Milner pointed out that ethnic speech (e.g., exhorting fellow members of ethnic minority groups to value the distinct aspects of their heritage) is not always recognized as readily as ethnic action (e.g., petitioning for a government to grant official recognition toward the cultural contributions of the ethnic minority group in question) for promoting social change. Both ethnic speech and ethnic action are important, not only in affirming individuals' ethnic identity, but also in enabling individuals to try and transform their physical and social environments in a manner that levels the social-structural playing field across ethnic groups within a given society -- a fundamental, though often overlooked, theme that permeates Tajfel's (1981; Tajfel & Turner, 1986) social identity theory (see Reicher, 1996).

This is not to minimize the difficulties that members of ethnic minority groups in particular may face when attempting to engage in ethnic speech or (especially) ethnic action. The literatures on sense of community (e.g., Sarason, 1974) and social capital (e.g., Perkins, Hughey, & Speer, 2002) indicate that in order for individuals to

engage in such behavior, the social-structural context must provide opportunities for the expression of ethnic behavior in the first instance. Fortunately, social identity theory is sufficiently flexible to incorporate constraints as well as opportunities that individuals may face when attempting to engage in ethnic action and ethnic speech (Towney, Kloos, Green, & Franco, 2011).

Identity Discourse and Identity Enactment as Reflected in Ethnic Speech and Ethnic Action

As we alluded in preceding paragraphs, social identity theory (Tajfel, 1981; Tajfel & Turner, 1986) proposes that identity includes personal and social components. In turn, *motivated identity construction theory* (Vignoles, 2011) – which takes social identity theory as a conceptual starting point – posits that a given aspect of identity (whether personal or social) is constructed partly by oneself and partly via collaboration with other persons (though not necessarily in an active or deliberate manner). Vignoles contended that "people are constantly striving to construct, maintain, and defend a satisfactory sense of identity" (2011, p. 405); such strivings are not inherently biologically based and may instead be culturally based. Thus, even when one is not considering ethnic identity in particular, an aspect or component of identity can reflect cultural influences.

Vignoles (2011) defined *identity* as "*all aspects of the image of oneself – as represented in cognition, emotion, and discourse*" (p. 404, emphasis in original). Vignoles's use of the term *discourse* when referring to identity-relevant behavior is especially of interest for the purposes of the present article. Even though social identity theory (Tajfel, 1981; Tajfel & Turner, 1986) did not initially address discourse, Wetherell (1996) argued that discourse is an active process by which individuals use "utterances" (p. 281) as means toward constructing their identities.

Vignoles (2001) referred to *identity motives* as "*tendencies toward certain identity states and away from others, which guide the processes of identity definition and enactment*" (p. 405, emphasis in original). Results of studies by Vignoles and colleagues (e.g., Easterbrook & Vignoles, 2012; Vignoles, Regalla, Manzi, Golledge, & Scabini, 2006) indicate that motives underlying identity definition include meaning, self-esteem, and distinctiveness; whereas motives underlying identity enactment include self-esteem, belonging, and efficacy. Thus, the self-esteem motive is reflected in identity definition as well as identity enactment, which is consistent with the emphasis on self-esteem within social identity theory (Tajfel, 1981; Tajfel & Turner, 1986). Nevertheless, the items that Vignoles and colleagues developed to measure identity enactment (e.g., Vignoles et al., 2006, p. 333) refer specifically to individuals' deeds (rather than words) as means toward constructing their identities.

The United Kingdom as a Societal Context for Engaging in Ethnic Speech and Ethnic Action

Before proceeding to the goals of the present study, we shall consider the United Kingdom as a particular societal context within which individuals might engage in ethnic speech and ethnic action (consistent with Verkuyten, 2005). En route to developing their interactive acculturation model (IAM), Bourhis and colleagues (Bourhis, Moise, Perreault, & Senecal, 1997) contended that Western democracies can be classified according to prevailing governmental policies on the integration of immigrants. Specifically, the United Kingdom can be categorized as a society with a *civic ideology*, whereby (1) immigrants are expected to embrace the public values of the host society; and (2) the host society is expected to refrain from interfering with the private values of individual immigrants. Although anti-discrimination laws in the United Kingdom are designed to protect immigrants from

verbal or physical assault, such laws do not typically promote financial or other tangible forms of governmental support for the maintenance of immigrants' cultural practices. Rather, financial support for cultural practices tends to be channelled toward the maintenance of the host (i.e., British) culture. One might imagine that under such societal circumstances, engagement in ethnic speech and ethnic action by members of ethnic minority groups are neither encouraged nor discouraged officially; whereas engagement in ethnic speech and ethnic action by members of ethnic majority groups might well be encouraged (and certainly would not be discouraged) officially.

The issue of state ideology is not addressed at length within Tajfel's (1981; Tajfel & Turner, 1986) social identity theory. Nevertheless, as Billig (1996) pointed out, Tajfel's personal experience as a Holocaust survivor who established a new life for himself in the U.K. made Tajfel keenly aware of the impact of state ideology on individuals' efforts toward engaging in ethnic behavior, especially ethnic speech. Like Wetherell (1996), Billig acknowledged the role that "utterances" (1996, p. 349) and "discourses" (p. 349) play in individuals' construction of social identities. In any event, social identity theory is compatible with the view that in order to understand real-life ethnic behavior properly, one must take individuals' societal context into account.

Goals of the Present Study

In the present study, we posed the following research question: What is the optimal number of factors that can be extracted from the newly created Brunel Ethnic Behavior Inventory (BEBI)? Also, we tested the following hypothesis: A two-factor model (with ethnic speech and ethnic action as separate, yet correlated, factors) will yield a significant improvement of goodness-of-fit to the interitem correlation matrix

than will a one-factor model (with ethnic behavior as a single, undifferentiated factor). We sought an answer to our research question, and tested our hypothesis, via separate exploratory factor analyses (see Thompson, 2004) for one pilot sample and for each of two main samples (denoted as Samples 1 and 2).

Method

Participants

Unlike the United States Census Bureau, the U.K. Office for National Statistics does not solicit separate responses regarding individuals' race and ethnicity. Instead, the U.K. Office for National Statistics (2011) solicits a single response (regarding ethnic group membership) that combines information regarding individuals' racial and national group memberships (see Gaines, Bunce, Robertson, & Wright, 2010; Gaines, Marelich, Bunce, Robertson, & Wright, 2013). Given that we conducted the present study within the United Kingdom, we adopted the U.K. Office of National Statistics ethnic group classification scheme, combining race and nationality.

Pilot sample. A total of 101 individuals comprised the pilot sample. Individuals in the pilot sample were recruited via a request by the first author during a first-year undergraduate class on Research Methods at the institution in question. Approximately two-thirds of the participants in the pilot sample were women; and nearly all of the participants were 18-19 years of age. In terms of ethnic group membership, 42.6% of participants in the pilot sample were of European descent, 29.7% were of Asian descent, 18.8% were of African descent, 3.0% were of mixed heritage, 4% were "Other," and 2% did not indicate their ethnic group membership.

Sample 1. A total of 120 individuals (45 men, 71 women, and four individuals who did not indicate their gender) comprised Sample 1. This was a

convenience sample with respondents recruited via one-on-one requests from the seventh through eleventh authors. The mean age of participants in Sample 1 was 24.85 years (*SD* = 10.37 years). In terms of ethnic group membership, 58.3% of Sample 1 participants were of European descent, 32.6% were of Asian descent, 5.9% were of African descent, and 3.4% were of mixed heritage.

Sample 2. Similarly, Sample 2 was a convenience sample comprised of 148 individuals (45 men, 85 women, and 18 individuals who did not indicate their gender). The mean age of participants was 25.96 years (*SD* = 10.07 years). In terms of ethnic group membership, 57.1% of participants in Sample 2 were of European descent; 27.7% were of Asian descent; 8.2% were of African descent; 6.8% were of mixed ancestry; and 0.7% did not indicate his or her ethnic group membership.

Materials

Ethnic speech. During a two-hour Ph.D. Masterclass on Advanced Issues in Survey Design, the first author (i.e., the lecturer for the class) gave a lecture on ethnic identity during the first hour (drawing primarily upon the ego psychology theory of Erikson, 1959/1980, 1968; and upon the ethnic identity research of Phinney, 1992; Phinney & Ong, 2007; R. E. Roberts, Phinney, Masse, Chen, C. R. Roberts, & Romero, 1999) and asked the second through sixth authors (i.e., the students in the class) to generate five items that reflect "things that people say that communicate their ethnic identity to others" (i.e., ethnic speech) during the second hour. Discussions initially were conducted among two subgroups (2-3 students per subgroup); topics included personal and family experience, as well as more general reflections on ethnic community dynamics. As a group, the six authors discussed each of the proposed ethnic speech items, modifying (if not eliminating) items following the discussion. The authors agreed upon the following five items: (1) "How often do you speak in

metaphors that reflect your ethnic context?"; (2) "How often do you refer to your ethnic group's practices or beliefs in conversation?"; (3) "How often do you draw upon your ethnic group's cultural norms regarding conversation etiquette?"; (4) "How often do you express pride in your ethnic origins?"; and (5) "How often do you discuss issues such as oppression and discrimination when you are with other members of your ethnic group?" For the pilot sample, each ethnic speech item was scored according to a 5-point, Likert-type scale (1 = never do this, 5 = constantly do this). For Samples 1 and 2, each ethnic speech item was changed to a 9-point, Likert-type scale (1 = never do this, 9 = constantly do this), in accordance with the original intention of the first through sixth authors.

Ethnic action. In addition, during the second hour of the aforementioned Ph.D. Masterclass, the first author asked the second through sixth authors to generate five items that reflect "things that people do that communicate their ethnic identity to others" (i.e., ethnic action). As was true of the ethnic speech items, the six authors discussed each of the proposed ethnic action items, modifying (if not eliminating) items following the discussion. The authors agreed upon the following five items: (1) "How often do you celebrate your ethnic group's festivals?"; (2) "How often do you interact with people within your own ethnic group?"; (3) "How often do you speak your native language?"; (4) "How often do you behave in a way that you view as representative of your ethnic group?"; and (5) "In times of adversity, how often do you draw upon the cultural practices that you associate with your ethnic group?" For the pilot sample, each ethnic action item was scored according to a 5-point, Likert-type scale (1 = never do this, 5 = constantly do this). For Samples 1 and 2, the scale was changed to a 9-point, Likert-type scale (1 = never do this, 9 = constantly do this), in accordance with the original intention of the first through sixth authors.

Procedure

Prior to collecting data from the pilot sample and from Samples 1 and 2, the first author obtained ethics approval from the Psychology Ethics Committee at the institution where the Ph.D. Masterclass had been taught (and where the present study ultimately was conducted). Upon completing the survey (which included the aforementioned ethnic behavior items, as well as several additional items that will not be discussed further), participants in the pilot sample read an informed consent page (explaining the purpose of the study in general terms) and gave their signatures to indicate that they were willing to participate in the present study. Subsequently, participants in the pilot sample completed each of the ethnic behavior items and read a debriefing form (explaining the purpose of the study in detail).

Pilot sample. For the pilot sample, the first author received permission from the Psychology Participant Pool Convenor to recruit first-year undergraduates who were enrolled in a Research Methods class at the institution in question. Subsequently, the first author gave a brief presentation to the class and posted a Facebook link that directed potential participants in the pilot sample to a specific SurveyMonkey address for the survey (labelled as "Group Dynamics Study"). Finally, participants in the pilot sample obtained research credit from the first author in exchange for taking part in the present study.

Samples 1 and 2. The first author employed several undergraduate research assistants (i.e., the seventh through eleventh authors) to recruit participants for Samples 1 and 2 (with the study promoted as "Group Dynamics Study"), outside as well as within the institution in question. After taking part in the study, participants in Samples 1 and 2 were thanked ; no incentives were offered to these participants).

Results

Distributions of scores for each item were normal in all of the samples (details are available from the first author upon request). Matrices of interitem correlations among scores on the ten ethnic behavior items for the pilot sample (*n* = 101), Sample 1 (among whom three individuals failed to answer one or more items, leaving a reduced *n* of 117), and Sample 2 (among whom three individuals failed to answer one or more items, leaving a reduced *n* of 145) are presented in Table 1. Inspection of the correlation matrices revealed that, in all of the samples, most of the correlations were significant and positive (average interitem correlations = .32 for the pilot sample, .30 for Sample 1, and .31 for Sample 2).

Insert Table 1 about here

Exploratory Factor Analyses

In order to answer our research question concerning the optimal number of factors that can be extracted from the BEBI, we conducted separate exploratory factor analyses with maximum likelihood solution, minimum eigenvalue of 1.00 for each factor to be retained, and Promax factor rotation via IBM SPSS 20 (IBM, 2011) for each of the three samples. Initially, it appeared that three factors would be optimal for the pilot sample; whereas two factors would be optimal for Samples 1 and 2. However, further inspection of results for the pilot sample revealed that the three-factor solution for the pilot sample was associated with substantial error in computation of communality estimates (i.e., producing so-called “Heywood cases” in which one or more communality coefficients exceed 100% and, thus, were uninterpretable; Thompson, 2004).

Consequently, we conducted a follow-up exploratory factor analysis for the pilot sample, in which we fixed the number of factors to two. The resulting two-factor pattern matrices and structure matrices for the pilot sample, Sample 1, and Sample 2 are shown in Table 2; interpretation of results will be limited to factor pattern matrices. Factor structure matrices are matrices of zero-order correlations between factor scores and item scores; whereas factor pattern matrices are matrices of partial correlations between factor scores and item scores, after controlling for correlations among two or more factor scores; Tabachnick & Fidell, 2007). Therefore, factor pattern matrices yield "cleaner" results than do factor structure matrices, which led us to focus on the factor pattern matrices.

Insert Table 2 about here

In order to test our hypothesis concerning the significance of improvement in goodness-of-fit to the correlational data from a one-factor model to a two-factor model, we replicated the aforementioned exploratory factor analyses via PRELIS 9.1 (Joreskog & Sorbom, 2012) for each of the three samples. Unlike IBM SPSS (IBM, 2011), PRELIS automatically generates a decision table (see Thompson, 2004) in which the chi-square values for all viable models are compared. Results of the decision trees (presented in Table 3) indicated that, in all of the samples (and consistent with our hypothesis), a two-factor model provided a significantly better fit to the correlational data than did a one-factor solution (p's $< .01$) and yielded acceptable chi-square/degrees-of-freedom ratios (i.e., between 1.00 and 2.00; Kline, 2005; Schumacker & Lomax, 2005). However, the chi-square values for the two-factor model remained significant in all of the samples; and the root mean square error

of approximation (i.e., RMSEA) values were somewhat higher than desired (i.e., higher than .06; Thompson, 2004), though at a reasonable level.

Insert Table 3 about here

In all of the samples, the first through fourth items that were designed to measure ethnic speech (i.e., "How often do you speak in metaphors that reflect your ethnic context?"; "How often do you refer to your ethnic group's practices or beliefs in conversation?"; "How often do you draw upon your ethnic group's cultural norms regarding conversation etiquette?"; and "How often do you express pride in your ethnic origins?") yielded positive loadings of .32 or higher (see Tabachnick & Fidell, 2007) only on Factor 1 (Ethnic Speech; it is worth noting that the second ethnic speech item also yielded a *negative* loading that fell just below the .32 threshold on Factor 2, Ethnic Action, in the pilot sample). Furthermore, in all of the samples, the second through fourth items that were designed to measure ethnic action (i.e., "How often do you interact with people within your own ethnic group?"; "How often do you speak your native language?"; and "How often do you behave in a way that you view as representative of your ethnic group?") yielded positive loadings of .32 or higher only on Factor 2 (Ethnic Action). Finally, in all of the samples, the fifth item that was designed to measure ethnic action (i.e., "In times of adversity, how often do you draw upon the cultural practices that you associate with your ethnic group?") yielded positive loadings of .32 or higher on both factors; this item was omitted from all remaining analyses.

Two sets of discrepancies emerged among loadings in the factor patter matrices across the samples. First, the fifth item that was designed to measure ethnic

speech (i.e., "How often do you discuss issues such as oppression and discrimination when you are with other members of your ethnic group?") yielded a positive loading above .32 on Factor 1 (Ethnic Speech) in Samples 1 and 2 but fell just below the .32 threshold in the pilot sample. Second, the first item that was designed to measure ethnic action (i.e., "How often do you celebrate your ethnic group's festivals?") yielded a positive loading above .32 on Factor 2 (Ethnic Action) in Sample 2 but yielded a positive loading above .32 on Factor 1 (Ethnic Speech) in the pilot sample and Sample 1 (this item also yielded a loading that fell just below the .32 threshold on Factor 1, Ethnic Speech, in Sample 2). In light of these discrepancies, we decided to exclude the two items in question from further analyses.

Additional Psychometric Analyses

Across the samples, the average internal consistency associated with the reduced, four-item ethnic speech scale was .80 (Cronbach's alphas = .77 for the pilot sample, .80 for Sample 1, and .84 for Sample 2). Also, across the samples, the average internal consistency associated with the reduced, three-item ethnic action scale was .66 (Cronbach's alphas = .62 for the pilot sample, .67 for Sample 1, and .69 for Sample 2). Overall, the internal consistency for the ethnic speech scale was generally above .70, the minimal level considered desirable; whereas the internal consistency for the ethnic action scale tended to be somewhat below that desired level (although .60 might be a more realistic threshold for scales with fewer than five items apiece; Nunnally & Bernstein, 1994).

In principle, the lower-than-desired internal consistency for the ethnic action scale could have resulted in attenuation of correlation between scores on the ethnic speech ethnic action scales (see Carmines & Zeller, 1979). Fortunately, though, the correlation between total scores on the ethnic speech and ethnic action scales was

significant and positive in all of the samples (*p*'s< .05 or lower), with an average correlation of .26 (*r*'s = .36 for the pilot sample, .21 for Sample 1, and .26 for Sample 2; reduction of items from the final scales resulted in a final *n* of 146 for Sample 2). All things considered, results of psychometric analyses of the BEBI indicated that the ethnic speech and ethnic action scales possessed acceptable factorial structures and internal consistency.

Discussion

Results of the present study provide a clear answer to our research question regarding the number of factors (i.e., two) that are measured by the Brunel Ethnic Behavior Inventory (BEBI) – namely, ethnic speech and ethnic action as correlated factors. Moreover, results of the present study lend support to our hypothesis that a two-factor model yields a significant improvement of goodness-of-fit over a one-factor model (i.e., ethnic behavior as an undifferentiated factor) when both models are applied to correlational data from the BEBI. Finally, a majority of the items within the BEBI do, in fact, measure only the factor that they were designed to measure.

Why did one of the BEBI items load on both factors in each of the samples, despite the general tendency for items to load on a single factor? In retrospect, the item in question (i.e., "In times of adversity, how often do you draw upon the cultural practices that you associate with your ethnic group?") resembles an item (i.e., "I participate in cultural practices of my own group, such as special food, music, or customs") that Phinney initially interpreted as an example of generalized *ethnic behavior* (Phinney, 1992, p. 173) but subsequently interpreted as an example of *exploration* (i.e., the cognitive and developmental component of ethnic identity; R. Roberts et al., 1999, p. 320) and eventually dropped entirely from her Revised Multigroup Ethnic Identity Measure (MEIM-R; Phinney & Ong, 2007, p. 276).

Although the phrase "cultural practices" might possess face validity among social psychologists (Verkuyten, 2005), the impreciseness of such a phrase might have contributed to its lack of construct validity among participants in all of the samples within the present study.

Strengths and Limitations of the Present Study

We believe that certain strengths characterize the present study. For instance, in spite of the conceptual and methodological difficulties that have plagued previous studies of ethnic behavior (Verkuyten, 2005), our results concerning the BEBI demonstrate that it is possible for researchers to develop a theoretically driven, psychometrically sound inventory that measures multiple aspects of ethnic behavior. In addition, results of the present U.K.-based study complement Gaines and colleagues' (e.g., Gaines, Bunce, Robertson, & Wright, 2010; Gaines, Marelich, Bunce, Robertson, & Wright, 2013) research on ethnic identity within the U.K., thus helping to address the critique (Verkuyten, 2005) that conceptual and methodological advancements concerning studies of ethnic identity and ethnic behavior in Europe have lagged behind comparable advancements in the United States (U.S.A.)

Notwithstanding the aforementioned strengths, we believe that certain limitations also characterize the present study. For example, critics of the present study might contend that our newly developed survey essentially repackages measures of pre-existing constructs, such as acculturation (e.g., Cuellar, Arnold, & Maldonado, 1995; Ryder, Alden, & Paulhus, 2000; Tsai, Ying, & Lee, 2000) and heritage language fluency (e.g., Berry, Phinney, Sam, & Vedder, 2006). Furthermore, just as Phinney and colleagues (e.g., Ong, Fuller-Rowell, & Phinney, 2010) have cautioned researchers against assuming that results of psychometric studies concerning measures of ethnic identity within the U.K. (e.g., Gaines et al., 2010) necessarily can be

generalized to the U.S. (let alone other sociocultural contexts), so too might critics of the present study caution researchers against assuming that results of the present study concerning our measure of ethnic behavior within the U.K. inevitably can be generalized to the U.S. or other sociocultural contexts.

All in all, we believe that the strengths outweigh the limitations in the present study. Regarding the originality of the BEBI, results of previous studies using Phinney's (1992) original MEIM suggest that constructs such as acculturation (e.g., Cuellar, Nyberg, Maldonado, & R. Roberts, 1997) and heritage language frequency (e.g., Kim & Chao, 2009) are related to, yet distinct from, ethnic behavior; we anticipate that results of prospective studies using the BEBI alongside existing measures of acculturation and heritage frequency similarly would reveal partial overlap at best. As for the potential generalizability of the results of the present study outside the U.K., although we do not know of any current research on ethnic speech or ethnic action as aspects of ethnic behavior in the U.S.A. or elsewhere, we are optimistic in light of the fact that results concerning the psychometric properties of the most widely used inventory of ethnic identity (i.e., the 12- and 14-item versions of Phinney's MEIM; Phinney, 1992; R. Roberts et al., 1999) have been shown to generalize across the U.K. (e.g., Gaines et al., 2010) and the U.S.A. (e.g., Juang & Nguyen, 2010).

Directions for Future Research

Future researchers might wish to explore links between our measures of ethnic behavior and other authors' measures of *psychological sense of community* (i.e., the extent to which members of a community bond together, socially and emotionally; Sarason, 1974). In the process of developing a multidimensional measure of psychological sense of community (i.e., the Multidimensional Territorial Sense of

Community Scale), Prezza and colleagues (Prezza, Pacilli, Barbaranelli, & Zampatti, 2009) noted that many European cities possess histories of a thousand years or longer. However, as growing numbers of members of ethnic (and especially racial) minority groups have immigrated to those cities, many minority group members have found it difficult to maintain their sense of community within societies that often are hostile toward their presumed differences (Verkuyten, 2005). The measurement of psychological sense of community (including membership, shared influence, social climate/bonds, help in case of need, and needs fulfilment) might be especially relevant to ethnic behavior in the U.K. and other European nations. Furthermore, Mannarini and colleagues (Mannarini, Rochira, & Talo, 2012) pointed out that the construct of psychological sense of community as measured by the Multidimensional Territorial Sense of Community Scale can be readily interpreted within the perspective of social identity theory (Tajfel, 1981; Tajfel & Turner, 1979) and one of its best-known conceptual descendants -- namely, self-categorization theory (Turner, 1982; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) – regarding the development and maintenance of social identity. Scores on our measures of ethnic speech and ethnic action might well be related to scores on one or more aspects of psychological sense of community.

In addition, future researchers might wish to expand our conceptualization and measurement of ethnic speech and ethnic action to include multiple ethnic components. Just as Gaines, Marelich, Bunce, Robertson, and Wright (2013) developed an expanded MEIM (based on R. Roberts et al., 1999) to include racial, religious, and national aspects of exploration and commitment in measuring ethnic identity, so too might future researchers develop and expanded BEBI to include racial, religious, and national aspects of ethnic speech and ethnic action. Such an expansion

in terms of concepts and methodology would require that future researchers build upon their theoretical base by drawing upon Erving Goffman's (1959, 1963) interactionist role theory, which directly addresses the role of race, religion, and nationality in social-psychological processes such as stigmatization and impression management (see Crocker, Major, & Steele, 1998). Nevertheless, not only do researchers stand to benefit from the increased conceptual and empirical richness of ethnic behavior constructs; but such efforts by researchers would help to integrate sociological perspectives into the quantitative literature on ethnic behavior in a manner that has been relatively uncommon since the late 1980s (for a review, see Phinney, 1990).

Conclusion

At the beginning of the present study, we referred to Verkuyten's (2005) distinction among "being," "feeling," "knowing," and "doing" as "ways of ethnicity." Results of the present study indicate that, with regard to "doing," Verkuyten was right to make a further distinction between what people say (i.e., ethnic speech) and what people do (i.e., ethnic action) as separate, yet related, dimensions of ethnic behavior. In closing, we encourage researchers to continue examining the "ways of ethnicity" in all their complexity, even as researchers attempt to clarify the extent to which individuals' manifestations of ethnicity reflect a unified sense of ethnic identity.

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Table 1:

Matrices of Zero-Correlations among Ethnic Behavior Items

Pilot sample correlations (n = 101)

Item	1	2	3	4	5	6	7	8	9	10
1	1.00									
2	.45	1.00								
3	.46	.61	1.00							
4	.30	.50	.49	1.00						
5	.26	.26	.40	.17	1.00					
6	.25	.30	.38	.52	.02	1.00				
7	.13	.03	.24	.23	.05	.26	1.00			
8	.08	.10	.23	.12	.21	.03	.34	1.00		
9	.30	.28	.38	.39	.36	.34	.33	.40	1.00	
10	.48	.47	.58	.53	.40	.46	.32	.31	.50	1.00

M	2.46	2.88	2.82	3.08	2.58	3.47	4.06	3.92	3.24	2.74
SD	1.16	1.01	1.01	1.28	0.96	1.04	0.81	1.21	1.06	1.07

Sample 1 correlations (n = 117)

Item	1	2	3	4	5	6	7	8	9	10
1	1.00									
2	.48	1.00								
3	.47	.53	1.00							
4	.31	.64	.56	1.00						
5	.43	.38	.37	.36	1.00					
6	.21	.46	.36	.50	.13	1.00				
7	.04	.06	.17	.15	-.03	.37	1.00			
8	-.15	-.03	.04	.02	.02	.15	.52	1.00		
9	.24	.30	.29	.29	.17	.32	.37	.34	1.00	
10	.44	.46	.52	.47	.29	.47	.38	.22	.52	1.00

M	3.51	3.77	4.21	4.51	3.84	5.52	7.31	7.61	5.41	4.31
SD	2.42	2.31	2.34	2.58	2.19	2.60	2.10	2.17	2.61	2.46

Sample 2 correlations (n = 145)

Item	1	2	3	4	5	6	7	8	9	10
1	1.00									
2	.65	1.00								
3	.47	.67	1.00							
4	.23	.61	.57	1.00						
5	.31	.42	.29	.17	1.00					
6	-.00	.32	.46	.43	.14	1.00				
7	.04	.16	.28	.15	.09	.24	1.00			
8	.04	.10	.15	.02	.21	.24	.39	1.00		
9	.14	.26	.36	.36	.12	.37	.47	.42	1.00	
10	.27	.44	.47	.46	.26	.47	.22	.18	.40	1.00

M	3.83	4.21	4.73	4.39	4.24	5.64	7.00	7.43	5.54	4.57
SD	2.24	2.39	2.40	2.34	2.09	2.51	1.97	2.49	2.38	2.43

Table 2:

Factor Structure and Factor Pattern Matrices for Ethnic Behavior Items [1]

[1]NOTE: Loadings in boldface were associated with those items that were retained only on the factor in question (i.e., items with absolute values of .32 or higher on one factor and absolute values below .32 on the other factor) within the factor pattern matrices.

1 = How often do you speak in metaphors that reflect your ethnic context?
2 = How often do you refer to your ethnic group's practices or beliefs in conversation?
3 = How often do you draw upon your ethnic group's cultural norms regarding conversation etiquette?
4 = How often do you express pride in your ethnic origins?
5 = How often do you discuss issues such as oppression and discrimination when you are with other members of your ethnic group?
6 = How often do you celebrate your ethnic group's festivals?
7 = How often do you interact with people within your own ethnic group?
8 = How often do you speak your native language?
9 = How often do you behave in a way that you view as representative of your ethnic group?
10 = In times of adversity, how often do you draw upon the cultural practices that you associate with your ethnic group?

Pilot sample (n = 101)

	Factor pattern		*Factor structure*	
Item	*1 (Ethnic speech)*	*2 (Ethnic action)*	*1 (Ethnic speech)*	*2 (Ethnic action)*
1	**.60**	**-**.03	.58	.31
2	**.94**	-.31	.76	.22
3	**.77**	.03	.78	.46
4	**.61**	.10	.66	.44
5	.31	.18	.41	.35
6	**.41**	.18	.51	.41
7	-.10	**.61**	.25	.55
8	-.09	**.59**	.24	.53
9	.18	**.58**	.51	.69
10	.57	.34	.78	.66

Sample 1 (n = 117)

	Factor pattern		*Factor structure*	
Item	*1 (Ethnic speech)*	*2 (Ethnic action)*	*1 (Ethnic speech)*	*2 (Ethnic action)*
1	**.65**	**-**.15	.60	.09
2	**.83**	-.12	.78	.19
3	**.71**	.02	.72	.29
4	**.75**	-.00	.74	.28
5	**.54**	-.14	.49	.07
6	**.45**	.29	.56	.46
7	-.10	**.81**	.20	.77
8	-.26	**.73**	.03	.63
9	.27	**.46**	.44	.56
10	.55	.36	.69	.56

Sample 2 (n = 145)

	Factor pattern		*Factor structure*	
Item	*1 (Ethnic speech)*	*2 (Ethnic action)*	*1 (Ethnic speech)*	*2 (Ethnic action)*
1	**.80**	**-**.23	.69	.13
2	**.94**	-.12	.88	.31
3	**.70**	.16	.77	.48
4	**.68**	.08	.71	.39
5	**.39**	.02	.40	.19
6	.31	**.37**	.48	.51
7	-.08	**.65**	.22	.61
8	-.12	**.58**	.15	.53
9	.04	**.75**	.38	.76
10	.41	.32	.55	.51

Table 3:

Decision Tables for One-Factor versus Two-Factor Models[2]

Pilot sample (*n* =101)

Model	*Chi-sq.*	*df*	*p*	*Chi-sq./ df ratio*	*Chi-sq. diff.*	*df diff.*	*p diff.*	*RMSEA*
1-factor	72.87	35	< .01	2.08	--	--	--	.10
2-factor	41.82	26	< .05	1.61	31.05	9	.01	.08

[2]NOTE: Chi-square/df ratios were calculated manually and were added to the decision tables. Although PRELIS 9.1 (Joreskog & Sorbom, 2012) also produced a decision table for a three-factor model in the pilot sample, problems with communality estimates that were detected by IBM SPSS 20 (IBM, 2011) in that particular sample led us to omit the decision table for a three-factor model (which, in any event, was not generated for Samples 1 or 2 by PRELIS).

RMSEA = Root mean square error of approximation.

Sample 1 (*n* =117)

Model	*Chi-sq.*	*df*	*p*	*Chi-sq./ df ratio*	*Chi-sq. diff.*	*df diff.*	*p diff.*	*RMSEA*
1-factor	125.19	35	< .01	3.58	--	--	--	.15
2-factor	43.18	26	< .05	1.90	82.01	9	.01	.08

Sample 2 (*n* =145)

Model	*Chi-sq.*	*df*	*p*	*Chi-sq./ df ratio*	*Chi-sq. diff.*	*df diff.*	*p diff.*	*RMSEA*
1-factor	138.45	35	< .01	2.08	--	--	--	.14
2-factor	49.27	26	< .01	1.61	89.18	9	.01	.08